

TO: All Owners/Operators of Idaho Title V Sources

FROM: Pat Nair, Manager
Air Quality Permit Program

SUBJECT: Section 112(j) of the Clean Air Act (MACT Hammer) Part II Application.

The purpose of this Memorandum is to provide guidance for Idaho facilities to use in complying with Section 112(j) of the federal Clean Air Act. On March 6, 2002, the U.S. Environmental Protection Agency (EPA) adopted a regulation implementing the provisions of section 112(j) (the "MACT Hammer" regulations). 67 Fed. Reg. 16582 (April 5, 2002). On December 9, 2002, EPA proposed revisions to the 112(j) rule 67 Fed. Reg. 72675 December 9, 2002. which establishes a new time table for submission of the 112(j) Part II application as a result of the settlement of Sierra Club v U.S. Environmental Protection Agency, No. 02-1135 (D.C. Circuit. You are advised to down load the rule from <http://www.epa.gov/fedrgstr/EPAFR-CONTENTS/2002/December/Day-09/contents.htm> and scroll down to Air pollutants, hazardous; national emission standards: Case-by-case determinations under Clean Air Act, etc., 72875-72888 [HTML] or [PDF]

Section 112(j) requires facilities to apply for a case-by-case determination of required emission limitations in the event EPA does not issue the technology-based, Maximum Achievable Control Technology (MACT) emission standards required by Clean Air Act Section 112(d) within the deadline imposed by Congress under the Clean Air Act. EPA was required to issue MACT standards for categories of sources that emit hazardous air pollutants (HAPs) on a set schedule, beginning in 1992, and continuing through November 15, 2000. Under Section 112(j), if EPA misses its schedule for a given source category by more than 18 months, the "hammer" falls; facilities that are major sources and operate emissions units in that source category must submit a permit application to obtain a case-by-case determination of what MACT will be for those emissions units.

The Clean Air Act provides that Title V permitting procedures should be used to issue case-by-case MACT determinations and that the determinations will be in the form of a Title V permit or permit revision issued by the permitting agency – in this case the Idaho Department of Environmental Quality.

The 112(j) rule required that affected sources submit a part-1 application by May 15, 2002. The second part of the two-step process required sources to submit a complete application with the specific information needed to obtain a case-by-case MACT determination by May 15, 2004 but the revised rule has proposed changing this date in accordance with the following schedule:

Due Date	MACT Standard
05/15/03	Municipal Solid Waste Landfills Flexible Polyurethane Foam Fabrication Operations Coke Ovens: Pushing, Quenching, and Battery Stacks Reinforced Plastic Composites Production Semiconductor Manufacturing Refractories Manufacturing ¹ Brick and Structural Clay Products Manufacturing, and Clay Ceramics Manufacturing ² Asphalt Roofing Manufacturing and Asphalt Processing ³ Integrated Iron and Steel Manufacturing Hydrochloric Acid Production and Fumed Silica ⁴ Engine Test Facilities and Rocket Testing Facilities ³ Metal Furniture (Surface Coating) Printing, Coating, and Dyeing of Fabrics Wood Building Products (Surface Coating)
10/30/03	Combustion Turbines Lime Manufacturing Site Remediation Iron and Steel Foundries Taconite Iron Ore Processing Miscellaneous Organic Chemical Manufacturing (MON) ⁵ Organic Liquids Distribution Primary Magnesium Refining Metal Can (Surface Coating) Plastic Parts and Products (Surface Coating) Chlorine Production Miscellaneous Metal Parts and Products (Surface Coating) (and Asphalt/Coal Tar Application—Metal Pipes) ³
04/28/04	Industrial Boilers, Institutional/Commercial Boilers and Process Heaters ⁶ Plywood and Composite Wood Products Reciprocating Internal Combustion Engines Auto and Light-Duty Truck (Surface Coating)
08/13/05	Industrial Boilers, Institutional/Commercial Boilers, and Process Heaters ⁷ Hydrochloric Acid Production ⁸

Includes Chromium Refractories Production.

² Two subcategories of Clay Products Manufacturing.

³ Two source categories.

⁴ Includes all sources within the category Hydrochloric Acid Production that burn no hazardous waste, and all sources in the category Fumed Silica.

⁵ Covers 23 source categories, see Table 2 of this preamble.

⁶ Includes all sources in the three categories, Industrial Boilers, Institutional/Commercial Boilers, and Process Heaters that burn no hazardous waste.

⁷ Includes all sources in the three categories, Industrial Boilers, Institutional/Commercial Boilers, and Process Heaters that burn hazardous waste.

⁸ Includes furnaces that produce acid from hazardous waste at sources in the category Hydrochloric Acid Production.

Currently EPA is in the process of promulgating the remaining MACT standards as expeditiously as possible but it is likely that all the pertinent deadlines will not be met so affected sources should be plan on submitting the required Part II application for a Section 112(j) determination. DEQ has adopted the recommended EPA Part II Application from which is attached. This form will be available on the DEQ web site as well.

The status of EPA MACT promulgations can be found at <http://www.epa.gov/ttn/atw/mactfnl.html> and <http://www.epa.gov/ttn/atw/mactprop.html>

If you have any questions about this guidance, please contact Tim Teater, IDEQ Air Toxics Program Analyst at (208) 373-0457.

Idaho Department of Environmental Quality
Part 2 Title V Application
Sources Subject to Section 112(j) Provisions
40 CFR 63.50 through 63.56

Source Identification	
1) Source Name:	
2) Source ID No.	
3) Contact Name/Phone:	
Physical Location	
4) Street Address	
5) City	6) County
7) State	8) Zip Code
Mailing Address (if different than physical location)	
9) Company Name and Address	
10) City	11) County
12) State	13) Zip Code

Part 1 Information	
14) Has any information contained in your Part 1 application changed? If so, please indicate what has changed:	<input type="checkbox"/> YES <input type="checkbox"/> NO

15) Required information (See instructions for completing the remainder of this form):

For each affected source (or emission unit; see instructions) in each relevant source category for which MACT standards have not been promulgated, please complete the following table:

A. Affected source (if new, note anticipated date of startup):					
B. Source category:					
C. Emission points	D. HAP emitted	E. Actual/Potential uncontrolled HAP emission rate	F. Actual/Potential controlled HAP emission rate	G. Control technology	H. Existing Federal/State/local limitations or requirements

I. Any other information relevant to establishing the MACT floor(s) (attach additional pages):

16) **Optional information:**

For each affected source listed above, you may provide the optional information contained in the following table:

A. Affected source:				
B. Emission points	C. Recommended MACT limitation	D. Control technology to be applied	E. Recommended operating limits	F. Recommended monitoring requirements

G. Other recommended terms and conditions (attach additional pages):

H. Recommended MACT for emission points at new sources (commencing construction or reconstruction after issuance of this permit) (attach additional pages):

Certification and Signature of Responsible Official

17) I certify that the information contained in this application to be true, accurate, and complete to the best of my knowledge:

Responsible Official:

Signature

Title

Printed name of Signatory

Date

A responsible official can be:*

- *The president, vice president, secretary, or treasurer of a corporation that owns the facility or a duly authorized representative that is responsible for the overall operation of the facility.*
- *An owner of the facility.*
- *A principal executive officer if the facility is owned by the federal, state, city or county government.*
- *A ranking military officer if the facility is located at a military base.*
- *A general partner of a partnership that owns the facility.*

* See Appendix 1 of the instructions for a complete definition.

Instructions for Completing the Section 112(j) Part 2 Application

Note: The form on the preceding pages is an example section 112(j) Part 2 title V application form. This form is not required but may be used to prepare a source's Part 2 application. A source should contact its permitting authority prior to preparing and submitting this form to confirm that this is the desired format, the information the permitting authority wants, and whether the permitting authority wants any other information not requested in the form.

Item 1. Provide name of source/facility applying for title V permit/modification.

Item 2. Provide your source identification number, if one is assigned.

Item 3. Identify the primary contact person and phone number for questions on the application.

Items 4 - 8. Provide physical location address of the source.

Items 9 - 13. Provide mailing address if different from the physical address.

Item 14. Indicate whether or not any information on the Part 1 application has changed. Note the changes. The permitting authority may want you to attach a copy of the Part 1 application.

Item 15. Required information: Provide all required information on the table, unless the permitting authority indicates otherwise. If previously submitted, the information may be referenced as long as the information is still correct (as verified and stated by the source owner or operator in this Part 2 application), contains what is requested here, and is readily available (e.g., a prior title V permit application currently on file with the permitting authority; the reference must be specific--section, page(s), and paragraph (or table) of the referenced document). Prepare a separate table for each affected source. The affected source is the emission point or group of emission points identified in the relevant proposed MACT standard. This table is presented as a suggested format and the amount of space for the information requested should not limit the information provided. Use as much space as necessary to complete the information for each emission point that is part of the affected source, including attaching additional pages.

A. Affected source: Identify and provide a brief description of the affected source. If there are multiple identical affected sources, label each with a unique identifier (remember to use a separate table for each affected source). If the affected source is defined broadly and consists of multiple diverse operations or units, each of which having multiple emission points, prepare a table for each unit or operation.

B. Source category: Identify the relevant source category from the list in Appendix 2.

C. Emission points: List each HAP emission point in the affected source. Some affected sources may have only one emission point; others may have dozens, depending on how the affected source is defined. If there are multiple similar or identical emission points, label each with a unique identifier.

D. HAP emitted: List each known HAP emitted from each emission point. If more than one HAP is emitted, provide its contributing percent as a percent of total HAP (or total emissions), if known.

E. Actual/Potential uncontrolled HAP emission rate: Provide both the actual and potential uncontrolled HAP emission rates (rate prior to any controls). Actual means typical or representative rates during proper operation of the source. Potential means the maximum capacity of a source to emit HAP under its physical or operational design. The rates may be reported in lbs/hour, although other emission rate formats may be more appropriate, especially if emissions vary over time. Provide the basis for determining the emission rates. The emission rates should represent the best possible estimate or measurement available (testing may be necessary if an estimated rate cannot be determined). Provide individual HAP emission rates, if available.

F. Actual/Potential controlled HAP emission rate: Provide both the actual and potential controlled HAP emission rates (if there are controls in place). The rates may be reported in lbs/hour, although other emission rate formats may be more appropriate, especially if emissions vary over time. Provide the basis for determining the emission rates. The emission rates should represent the best possible estimate or measurement available (testing may be necessary if an estimated rate cannot be determined). Provide individual HAP emission rates, if available.

G. Control technology: Identify the control technology or other means of emission reduction, if any, currently in place. Identify the emission capture technology/system and estimated or measured capture efficiency.

H. Existing Federal/State/local limitations or requirements: Identify all existing Federal, State, and local emission limitations or other emission requirements, including design, equipment, work practice, and operational requirements that currently apply.

I. Any other information relevant to establishing the MACT floor(s): Such information would be source dependent. The permitting authority may identify other information requirements, and the source owner or operator may volunteer such information. Such information could include production rates, capacities, etc. Such information may also include other available information (see definition in Appendix 1 of the instructions) as well as information contained in EPA or other regulatory agency databases on control technology (e.g., the BACT/RACT/LAER Clearinghouse). It is not possible to identify all such information for each type of source on this form. The source owner or operator may also choose to recommend a MACT floor for each emission point or affected source. If a MACT floor is recommended, please provide the basis and analysis performed for determining or recommending the floor. It should be noted that

most permitting authorities will likely accept EPA's proposed MACT floor in the relevant standards.

Item 16. Optional information: Provide any or all information at the owner or operator's discretion. Use as much space as necessary. Prepare a separate table for each affected source. If you plan to recommend the proposed MACT standard, please reference the standard (date and Federal Register notice cite, e.g., Dec. 12, 2002, 67 FR 3333, NESHAP for Widget Manufacturing). For each emission point, indicate "as proposed," if you are recommending the proposed standard. If there is more than one compliance option for an emission point, indicate which option will be used for that point. Use as many pages as necessary to discuss all the emission points in the affected source.

A. Affected source: Use the same identification for the affected source as used in the required information.

B. Emission point: Use the same identification for the emission point as used in the required information.

C. Recommended MACT limitation: Identify recommended emission limitations. The limitations may be in any reasonable format (e.g., lb/hr, ppm, lb/lb production) that relates to MACT and is at least as stringent as the MACT floor. If a performance-type format cannot be specified (emissions cannot be reasonably measured), then a design, work practice, equipment, or operational standard may be recommended, as long as it relates to MACT and is at least as stringent as the MACT floor.

D. Control technology to be applied: Identify the control technology (or other emission reduction techniques) that would be applied to achieve the MACT limitation. Include technical information on the design, operation, size, estimated control efficiency, and any other relevant information.

E. Recommended operating limits: Identify recommended operating limits. These would generally be in terms of temperature limits, pressure drop, etc., that are related to the MACT limits. Provide the basis for determining the relationship/correlation to the MACT limits.

F. Recommended monitoring requirements: Identify the relevant parameters for the control technology (or other emission reduction techniques) to be monitored to demonstrate continuous compliance with the MACT limitation. If continuous emission or opacity monitoring cannot reasonably be established, operating limits may be specified based on monitored parameters as an alternative. Continuous monitoring should be specified, unless not appropriate. If noncontinuous monitoring is recommended, explain why continuous monitoring could not be established.

G. Other recommended terms and conditions: Identify any other requirements associated with case-by-case MACT you would like to recommend. These can be test methods for determining initial or ongoing compliance, recordkeeping, and reporting.

H. Recommended MACT for emission points at new sources (commencing construction or reconstruction after issuance of this permit): Complete a separate table for new sources that recommends new source MACT and other terms and conditions for each emission point.

Item 17. The responsible official must certify and sign the application.

Appendix 1 - Selected Definitions

Available information means, for the purposes of conducting a MACT floor finding and identifying control technology options under 40 CFR 63, subpart B, any information that is available as of the date on which the first Part 2 MACT application is filed for a source in the relevant source category or subcategory in the State or jurisdiction; and is additional relevant information that can be expeditiously provided by the Administrator, is submitted by the applicant or others prior to or during the public comment period on the section 112(j) equivalent emission limitation for that source, or is information contained in the information sources below:

- (1) A relevant proposed regulation including all supporting information.
- (2) Relevant background information documents for a draft or proposed regulation.
- (3) Any relevant regulation, information or guidance collected by the Administrator establishing a MACT floor finding and/or MACT determination.
- (4) Relevant data and information available from the Clean Air Technology Center developed pursuant to section 112(l)(3) of the Clean Air Act (CAA).
- (5) Relevant data and information contained in the Aerometric Information Retrieval System (AIRS).
- (6) Any additional information that can be expeditiously provided by the Administrator.
- (7) Any information provided by applicants in an application for a permit, permit modification, administrative amendment, or notice of MACT approval pursuant to the requirements of §§63.50-63.56.
- (8) Any additional relevant information provided by the applicant.

Control technology means measures, processes, methods, systems, or techniques to limit hazardous air pollutant (HAP) emissions, including, but not limited to the following measures which:

- (1) Reduce the quantity or eliminate emissions of such HAP through process changes, substitution of materials or other modifications;
- (2) Enclose systems or processes to eliminate emissions;
- (3) Collect, capture, or treat HAP when released from a process, stack, storage or fugitive emissions point;
- (4) Are design, equipment, work practice, or operational standards; or
- (5) A combination of any or all of the above.

Maximum achievable control technology (MACT) for existing sources means the emission limitation reflecting the maximum degree of reduction of HAP emissions (including prohibition on such emissions, where achievable) that the Administrator, taking into consideration the cost of achieving such emission reductions and any nonair quality health and environmental impacts and energy requirements, determines is achievable by sources in the category or subcategory to which such emission standard applies. This limitation shall not be less stringent than the MACT floor.

MACT for new sources means the emission limitation which is not less stringent than the emission limitation achieved in practice by the best controlled similar source, and which reflects the maximum degree of HAP emission reduction (including a prohibition on such emissions, where achievable) that the Administrator, taking into consideration the cost of achieving such

emission reductions and any nonair quality health and environmental impacts and energy requirements, determines is achievable by sources in the category or subcategory to which such emission standard applies.

MACT floor means:

(1) For existing sources:

(i) The average emission limitation achieved by the best performing 12 percent of the existing sources in the United States (for which the Administrator has emission information), excluding those sources that have, within 18 months before the emission standard is proposed or within 30 months before such standard is promulgated, whichever is later, first achieved a level of emission rate or emission reduction which complies, or would comply if the source is not subject to such standard, with the lowest achievable emission rate (as defined in section 171 of the CAA) applicable to the source category and prevailing at the time, in the category or subcategory, or categories and subcategories of stationary sources with 30 or more sources.

(ii) The average emission limitation achieved by the best performing 5 sources in the United States (for which the Administrator has or could reasonably obtain emission information) in the category or subcategory, for a category or subcategory of stationary sources with fewer than 30 sources.

(2) For new sources, the emission limitation achieved in practice by the best controlled similar source.

Responsible official means one of the following:

(1) For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit, and either:

(i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or

(ii) The delegation of authority to such representatives is approved in advance by the permitting authority.

(2) For a partnership or sole proprietorship: a general partner or the proprietor, respectively.

(3) For a municipality, State, Federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of 40 CFR part 63, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of EPA).

(4) For affected sources:

(i) The designated representative in so far as actions, standards, requirements, or prohibitions under title IV of the CAA or the regulations promulgated thereunder are concerned; and

(ii) The designated representative for any other purposes under 40 CFR part 70.

Appendix 2 - Source Categories Subject to CAA Section 112(j)

Asphalt processing and asphalt roofing manufacturing (2 source categories)*
Auto and light duty truck (surface coating)
Brick, structural clay products manufacturing and Clay ceramics manufacturing (2 source categories)*
Chlorine production
Coke ovens: pushing, quenching, and battery stacks*
Combustion turbines
Engine test facilities and rocket testing facilities (2 source categories)*
Printing, coating, and dyeing of fabrics*
Flexible polyurethane foam fabrication operations*
Hydrochloric acid production and fumed silica (2 source categories)*
Industrial, commercial and institutional boilers, and process heaters (3 source categories)
Integrated iron and steel manufacturing*
Iron and steel foundries (2 source categories)
Lime manufacturing
Metal can (surface coating)
Metal furniture (surface coating)*
Miscellaneous metal parts and products (including Asphalt/coal tar application on metal pipes) (2 source categories)*
Miscellaneous organic chemical manufacturing (combining 23 source categories into one) (MON)*
Organic liquids distribution*
Plastic parts and products (surface coating)
Plywood and composite wood products
Primary magnesium refining
Reciprocating internal combustion engines
Refractories manufacturing*
Reinforced plastic composite production*
Semiconductor manufacturing*
Site remediation*
Municipal solid waste landfills*
Taconite iron ore processing
Wood building products (surface coating)*

* Proposed as of September 26, 2002

Appendix 3 - Additional Resources

Documents

- Section 112(j) regulation: 40 CFR part 63, subpart B (§§63.50 - 63.56)
- Section 112(j) proposed amendments: March 23, 2001; 66 FR 16318
- Section 112(j) final amendments: April 5, 2002; 67 FR 16582
- National Emission Standards for Hazardous Air Pollutants for Source Categories: General Provisions and Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections, Sections 112(g) and 112(j) - Background Information for Promulgated Standards, EPA 453/R-02-002, February 2002
- Guidelines for MACT Determinations under Section 112(j) Requirements, EPA 453/R-02-001, February 2002

Websites

- Air Toxics Web site (ATW) Rules and Implementation:
<http://www.epa.gov/ttn/atw/eparules.html>
- Section 112(j) Web page: <http://www.epa.gov/ttn/atw/112j/112jaypg.html>

Contacts

- Individual MACT rule writers are listed on the ATW Rules and Implementation website under the “Table of Completed Regulations,” “Table of Proposed Regulations,” and “Table of Upcoming Regulations,” near the top of the page.
- For information on the section 112(j) rule, contact Rick Colyer, (919) 541-5262, colyer.rick@epa.gov.
- EPA regional offices
- State/local permitting authorities